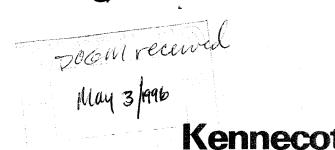
Kennecott Utah Copper Corporation 8315 West 3595 South P.O. Box 6001 Magna, Utah 84044-6001 (801) 252-3179 (801) 252-3125 (FAX)

Elaine J. Dorward-King, Ph.D.

Director, Environmental Affairs



May 2, 1996

Mr. D. Wayne Hedberg Permit Supervisor, Mineral Regulatory Program State Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

Re: <u>Permit Amendment, Kennecott Utah Copper Corporation, Bingham Canyon Mine,</u> M/035/002, Salt Lake County, Utah

Dear Mr. Hedberg:

Last fall, KUCC provided the Division with a permit amendment application for the Bingham Canyon Mine (M/035/002). The Division subsequently responded on September 29, 1995 with a letter requesting additional detailed information regarding the Dry Fork Water Management Project that was unavailable at that time. Over the winter, detailed engineering and design work was completed as no work could proceed in the project area due to the accumulation of snow.

The Division requested that KUCC address its responses according to the applicable State rule as outlined in your September 29, 1995 letter. KUCC has briefly done this in the remainder of this letter. However, some changes in the project have been made since the application last fall because of engineering evaluations and design changes. Therefore, KUCC has included a revised permit amendment application.

R647-4-105.2.12 Maps and Drawings

Drawing No. 603-T-0654 shows the acreage proposed to be disturbed by the project. The three areas of disturbance are outlined as the access road, the topsoil stockpile, and the dam & topsoil site. This drawing is included with the revised permit amendment application.

R647-T-105.3.15 Maps and Drawings - Sediment Ponds, Diversions, Culverts, etc.

The design of the catch basins was evaluated over the winter and a new design was created. The

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catch basin will consist of one large basin located immediately downstream of a small catch basin that will act as a sediment catch. The sediment catch basin will actually be the cofferdam that is used to keep water out of the freshwater catch basin during construction. Detailed drawings and cross sections of these facilities are located on Drawings No.'s 603-C-1200, 603-T-0655, 603-C-6121, and 603-C-6120. These drawings are included in the revised permit amendment application.

Design calculations for sizing these structures, including emergency overflow provisions, pond maintenance procedures and detailed design drawings of the catch basins, culverts, overflow protections, piping and piping connections are all included in the revised permit amendment application.

R647-4-105.3.17 Maps and Drawings - Reclamation Treatment Map

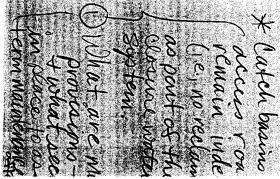
Drawing No. 603-T-0657 shows areas of disturbance and reclamation that will be done upon completion of project construction. KUCC will reclaim the disturbance from this project upon completion of construction with the exception of the permanent facilities. KUCC intends to use the access road and catch basins after the cessation of mining at the Bingham Canyon Mine as part of the post-closure water management system. Therefore, after project construction and reclamation, there will be no disturbed areas to reclaim other than the access road and catch basins which are scheduled to remain indefinitely.

R647-106.5 Operations Plan - Topsoil Description

The soils to be impacted are topsoil, which will be salvaged, replaced after construction or stockpiled; and alluvial silts, silty sands and gravels which will be used in the construction of the clean water dam. Rock will be quarried for construction of the cofferdam and for use as rip-rap on the upstream face of the clean water dam.

Because the majority of the soil will be set aside and replaced in a short period of time, no agronomic analysis of the soil will be performed. Salvaged topsoil will be replaced in most of the disturbed areas at the dam and basin sites immediately following the completion of construction, with the balance stockpiled. Topsoil that is to be stockpiled for long-term reclamation will be sampled and analyzed to determine fertilization requirements prior to use.

The quantities that will be salvaged, stockpiled, or replaced following construction are discussed in the revised permit amendment application.



R647-4-106.6 Operations Plan - Topsoil Protection

Topsoil protection is discussed in the revised permit amendment application and includes location selection to provide protection from storm runoff, slopes no steeper than 3H:1V, and a minimum 2 ft. High berm at the toe of the stockpile. The stockpile will be ripped perpendicular to the slope and seeded to establish vegetation.

R647-4-106.7 Operations Plan - Vegetation Description

Existing vegetation for this area is described in the August 9, 1976 Mining Application No. ACT-035-002 under the Mining and Reclamation Plan, item 2 page 5. It states "Vegetation on areas that will eventually be covered consists of grasses, forbs, shrubs and trees such as juniper, mountain mahogany and maple. The pH of undisturbed soils ranges from 4.5 to 7.5 as determined by mixing 100 gm of soil and 100 ml of distilled water." A vegetative cover level was not established in the original permit. However, the same vegetation described above is still present, as well as gambel oak and quaking aspen trees, and covers approximately 75% to 90% of the area.

R647-4-110.2 Reclamation Plan

The reclamation plan as described in the permit amendment (9/13/95) indicated that the catch basins and associated piping would be left in place after the cessation of mining activities for long term water management. This is still the case. The subject catch basins will be an integral part of keeping clean water from contacting the Dry Fork waste rock dump.

Reclamation plans were provided for the access road because it was believed at that time that KUCC could route a new access road across the final waste rock dump in the canyon. This no longer appears feasible and KUCC intends to leave the access road in place to service the water management facilities after mining operations have stopped. Because KUCC intends to utilize these facilities indefinitely, no detailed reclamation plans or cost estimates have been prepared.

The access road cut and fill slopes will be seeded immediately following construction in those areas with suitable, in-place native soils. No top soiling will be done. If the road is abandoned, downcast materials would be retrieved for use in recontouring. The stockpiled topsoil would be sampled and analyzed to determine fertility requirements prior to placement of the reclaimed road and would be seeded. However, abandoning this road is very unlikely.

Immediately following construction, approximately 75% of the disturbed areas at the dam and pond basin sites will be reclaimed. Topsoil from the stockpile at these sites will be replaced over these areas. The replaced topsoil will be ripped and seeded by broadcast, drill, pit, and hydro methods or some combination thereof. The rock quarry, the cofferdam and the upstream rip-rapped face of the

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clean water dam will not be reclaimed. Interim reclamation of the topsoil stockpiles has been described in R647-4-106.6. Final disposition of stockpiled topsoil will be determined after agronomic analysis. KUCC has budgeted approximately \$10,000 for ripping, scarifying, fertilizing and seeding of these areas (\$400/acre at 24.6 acres) as part of the 1996 reclamation activities. The recontouring and earthmoving costs will be covered under the engineering and construction portions of the project.

R647-4-113.3 Reclamation Surety

KUCC still requests that the reclamation surety be waived for this project. Justification for the surety to be waived is the same as in the original proposal. KUCC intends to concurrently reclaim those disturbed areas associated with this project except where a permanent facility is constructed. This means that the final part of the construction project includes the reclamation of areas disturbed during the project. The only disturbed areas associated with this project that will not be reclaimed are the access road surface, the rock quarry, the cofferdam and the upstream rip-rapped face of the clean water dam. KUCC believes that on new construction projects as this, concurrent releamation is more cost effective and better for the environment. If the only areas left unreclaimed are the permanent facilities, KUCC does not believe a reclamation surety would be reeasonable as the reclamation of those facilities may or may not occur at some indefinite time after mining activities have stopped.

After you and your staff have had a chance to review this letter and the attached revised permit amendment application, KUCC would like to review this project with you and finalize the necessary revisions to permit No. M/035/002.

Sincerely,

Elaine J. Dorward-King, Ph.D.

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Director, Enviornmental Affairs

Attachment